

In the Claims:

Claims 1 to 7 (Canceled).

1 **8.** (New) Milling method for the production of structural
2 components from materials that are difficult to machine by
3 chip-cutting, while producing depressions with at least one
4 sidewall, especially for the production of integral bladed
5 rotors for gas turbines, whereby the depressions especially
6 form flow channels and the sidewalls especially form blade
7 surfaces, whereby a milling tool is moved along at least
8 one defined tool path or milling path for the milling,
9 characterized in that, in addition to the or each tool
10 path, at least one collision contour corresponding to the
11 surfaces or edges of the at least one sidewall is defined
12 and the position or orientation of the milling tool
13 relative to the or each collision contour is monitored,
14 whereby the position or orientation of the milling tool is
15 changed and/or an error message is generated if at least
16 one of the collision contours is damaged by the milling
17 tool, and whereby the or each collision contour relates to
18 the structural component to be produced.

1 **9.** (New) Method according to claim 8, characterized in that
2 the position or orientation of the milling tool along the
3 or each tool path relative to the structural component to

4 be milled are determined by tool vectors, whereby the tool
5 vectors are defined with cutting advance or lead angles and
6 clearance or pitch angles.

1 10. (New) Method according to claim 8, characterized in that,
2 for the milling of depressions that are bounded by two
3 sidewalls, two collision contours are defined, whereby a
4 first collision contour lies on a first sidewall and a
5 second collision contour lies on a second sidewall.

1 11. (New) Method according to claim 10, characterized in that,
2 when the milling tool damages the collision contour that
3 lies on the sidewall that is currently to be milled, the
4 position or orientation of the milling tool is changed in
5 such a manner that the damage of the collision contour is
6 removed.

1 12. (New) Method according to claim 11, characterized in that
2 for this purpose, the clearance or pitch angle of the tool
3 vector is increased.

1 13. (New) Method according to claim 10, characterized in that,
2 when the milling tool damages the collision contour that
3 lies on the sidewall lying opposite the sidewall that is
4 currently to be milled, an error protocol and/or an error
5 message is generated.

1 14. (New) Method according to claim 13, characterized in that
2 the error protocol is used for the dimensioning of the
3 milling tool, especially for the determination of the
4 miller diameter.

[REMARKS FOLLOW ON NEXT PAGE]